

Listing of Claims. This Listing of Claims replaces all prior versions and listings of Claims in the application.

1           1.     (Withdrawn)     An audible alert device for generating a pulse width  
2 modulated signal, the audible alert device connectable to a power source, the  
3 audible alert device comprising:

4               a circuit including a pulse width modulated signal generator; and  
5               a transducer conductively connected to the circuit.

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1           2.     (Withdrawn)     The audible alert device of Claim 1 further comprising  
2 the circuit and the transducer at least partially enclosed within a housing.

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1           3.     (Withdrawn)     The audible alert device of Claim 1 wherein the pulse  
2 width modulated signal generator further comprises:

3               a first square wave frequency timer for generating a pulse width modulated  
4 signal;

5               a second square wave frequency timer for generating a square wave; and

6               a duty cycle controller for controlling a decibel output level of the transducer.

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1           4.     (Withdrawn)     The audible alert device of Claim 1 wherein the circuit  
2 further comprises a feedback signal processor conductively connected to the pulse  
3 width modulated signal generator.

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1           5.     (Withdrawn)     The audible alert device of Claim 1 further comprising:  
2 an output current sensor conductively connected to the transducer, for  
3 sensing a resistance at the transducer and generating a signal representative of  
4 transducer output current level;

5               a feedback signal processor including;

6 a feedback signal generator conductively connected to the output current  
7 sensor for generating a signal representative of transducer output current level; and  
8 a resonant frequency peaking circuit for processing the signal representative  
9 of transducer output current level and generating a feedback signal representative of  
10 transducer output current level, the pulse width modulated signal generator  
11 responsive to the feedback signal to generate a pulse width modulated signal at a  
12 resonant frequency.

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1 6. (Withdrawn) The audible alert device of Claim 1 further comprising:  
2 an output current sensor conductively connected to the transducer, for  
3 sensing a resistance at the transducer and generating an analog signal  
4 representative of transducer output current level;  
5 a feedback signal processor including;  
6 a feedback signal generator conductively connected to the output current  
7 sensor, the feedback signal generator including an analog to digital converter for  
8 converting the analog signal representative of transducer output current level to a  
9 digital value representative of transducer output current level; and  
10 a resonant frequency peaking circuit conductively connected to the pulse  
11 width modulated signal generator for processing the digital value representative of  
12 transducer output power level and generating a feedback signal representative of  
13 transducer output current level, the pulse width modulated signal generator  
14 responsive to the feedback signal to generate a pulse width modulated signal at a  
15 resonant frequency.

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1 7. (Withdrawn) An audible alert device for generating a pulse width  
2 modulated  
3 signal, the audible alert device connectable to a power source, the audible alert  
4 device comprising:  
5 a transducer;  
6 a circuit including a power conditioning circuit conductively connected to the  
7 transducer; and

8 a pulse width modulated signal generator conductively connected to the  
9 transducer, the pulse width modulated signal generator including a first square wave  
10 frequency timer for generating a pulse width modulated signal, a second square  
11 wave frequency timer for generating a square wave and a duty cycle controller for  
12 controlling a decibel output level of the transducer.

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1 8. (Withdrawn) The audible alert device of Claim 7 further  
2 comprising the circuit and the transducer at least partially enclosed within a housing.

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1 9. (Withdrawn) The audible alert device of Claim 7 further  
2 comprising:  
3 an output current sensor conductively connected to the transducer, for  
4 sensing a resistance at the transducer and generating a signal representative of  
5 transducer output current level;  
6 a feedback signal processor including;  
7 a feedback signal generator conductively connected to the output current  
8 sensor for generating a signal representative of transducer output current level; and  
9 a resonant frequency peaking circuit for processing the signal representative of  
10 transducer output current level and generating a feedback signal representative of  
11 transducer output current level, the pulse width modulated signal generator  
12 responsive to the feedback signal to generate a pulse width modulated signal at a  
13 resonant frequency.

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1 10. (Withdrawn) The audible alert device of Claim 7 further comprising:  
2 an output current sensor conductively connected to the transducer, for  
3 sensing a resistance at the transducer and generating an analog signal  
4 representative of transducer output current level;  
5 a feedback signal processor including;  
6 a feedback signal generator conductively connected to the output current  
7 sensor, the feedback signal generator including an analog to digital converter for

8 converting the analog signal representative of transducer output current level to a  
9 digital value representative of transducer output current level; and  
10 a resonant frequency peaking circuit conductively connected to the pulse  
11 width modulated signal generator for processing the digital value representative of  
12 transducer output power level and generating a feedback signal representative of  
13 transducer output current level, the pulse width modulated signal generator  
14 responsive to the feedback signal to generate a pulse width modulated signal at a  
15 resonant frequency.

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1 11. (Currently Amended) A method for manufacturing an audible alert  
2 device includes the steps of:

3 manufacturing a programmable audible alert device circuit including a pulse  
4 width modulated signal generator conductively connected to the transducer, a power  
5 conditioning circuit conductively connected to the pulse width modulated signal  
6 generator, a power conductor, conductively connected to the power conditioning  
7 circuit, an output current sensor conductively connected to the transducer, a  
8 feedback signal processor connected to the output current sensor and a memory  
9 device conductively connected to the feedback signal processor;

10 connecting the programmable audible alert device circuit to a transducer;

11 installing the programmable audible alert device circuit and transducer in a  
12 housing;

13 casting the programmable audible alert device circuit in a sealing fluid;

14 connecting the audible alert device to a device programming station; and

15 programming the audible alert device.

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1 12. (Cancelled) The method for manufacturing an audible alert device of  
2 Claim 11 wherein the step of manufacturing a programmable audible alert device  
3 circuit includes manufacturing a circuit including a pulse width modulated signal  
4 generator conductively connected to the transducer, a power conditioning circuit  
5 conductively connected to the pulse width modulated signal generator, a power  
6 conductor, conductively connected to the power conditioning circuit, an output

7 current sensor conductively connected to the transducer, a feedback signal  
8 processor connected to the output current sensor and a memory device conductively  
9 connected to the feedback signal processor.

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1 13. (Original) The method for manufacturing an audible alert device of  
2 Claim 11 wherein the step of connecting the audible alert device to a device  
3 programming station includes connecting the audible alert device to the device  
4 programming station by one or more power conductors of the programmable audible  
5 alert device.

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1 14. (Original) The method for manufacturing an audible alert device of  
2 Claim 11 wherein the step of programming the audible alert device includes  
3 transferring operation mode data to the memory device, the operation mode data  
4 representative of pre-selected operation mode data selected from a group data for  
5 operating audible alert devices.

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1 15. (Original) The method for manufacturing an audible alert device of  
2 Claim 11 wherein the step of programming the audible alert device includes  
3 transferring resonant peaking subroutine data to the memory device.

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1 16. (Original) The method for manufacturing an audible alert device of  
2 Claim 11 wherein the step of programming the audible alert device includes  
3 transferring decibel peaking subroutine data to the memory device.

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1 17. (Original) The method for manufacturing an audible alert device of  
2 Claim 11 wherein the step of programming the audible alert device includes  
3 conducting a resonant peaking subroutine.

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1 18. (Original) The method for manufacturing an audible alert device of  
2 Claim 11 wherein the step of programming the audible alert device includes  
3 conducting a decibel peaking subroutine.

1           19.   (Original)    A method for operation of an audible alert device in a  
2 normal operations mode includes the steps of:  
3           powering the audible alert device;  
4           monitoring an output current;  
5           conducting a dynamic resonant frequency peaking subroutine;  
6           conducting a dynamic decibel peaking subroutine ;  
7           initiating generation of a pulse width modulated signal; and  
8           outputting the pulse width modulated signal at a transducer.